



Clinical Reminders

Clinician Guide

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Clinical Desktop Services
Office of Information
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Introduction

Overview

Clinical Reminders furnish providers with timely information about their patients' health maintenance schedules. This information is provided in the Computerized Medical Record System (CPRS), Encounter Forms, and Health Summaries. The clinicians can then respond to the reminders by placing relevant orders or recording clinical activities on patients' progress or consults notes. Thus, Clinical Reminders become a valuable decision support tool for clinicians.

Clinical Reminders were originally included as a component of Patient Care Encounter (PCE) V. 1.0, released in 1996. Now Clinical Reminders V. 1.5 is being released as an independent package.

New Features in Clinical Reminders V. 1.5

New CPRS Reminder *Selection* for the Clinician

- Access to reminder processing from the CPRS Notes and Consults tabs
- Allows multiple reminders to be selected for resolution
 - Reminders Due
 - Reminders Applicable
 - Reminder Categories
- Allows selected reminders to be sorted by priority, last occurrence, or date due

New CPRS Reminder Resolution *Processing* for the Clinician

- Provides point-and-click resolution of selected reminders
- Provides finding items (dialogs) unique to the reminder being processed
- Generates progress note and consult text as finding items are checked off, providing a medical legal record
- Updates PCE with appropriate encounter data, providing workload credit
- Provides ability to add orders
- Provides ability to score and save mental health tests in the mental health package.

Overview

New CPRS Reminder *Reference* Access for the Clinician

- Provides right-click reference information for any reminder
 - Clinical Maintenance
 - Education Topic content (when applicable)
 - Reminder Inquiry
- Web links to access supporting web sites, such as the National Clinical Guidelines web site

Examples of reminder logic that can now be supported

- Inhaler education for drug class oral inhalers
- Diabetic and BP >140/85 needs anti-HTN
- Microalbuminuria and an ACE Inhibitor
- INH and liver enzymes
- AIMS test based on drug class
- MUGA and adriamycin
- PFTs and bleomycin
- INH and Vit B6
- TSH>10 and levothyroxine
- CD4<200 and PCP prophylaxis/PCP education

Related Documentation:

Clinical Reminders Installation Guide

Clinical Reminders Manager Manual

Clinical Reminders Quick Reference Card

CPRS Online Help (Clinical Reminders help is included within the CPRS Help files, available from the Help menu on the CPRS GUI. Help can also be accessed on specific Reminders screens with the F1 key.)

Web Sites:

The Technical Services Reminders Page listed below contains documentation and other related information. In the future, it will contain updates to the Clinical Reminders package as they occur.

Technical Services Reminders Page <http://vista.med.va.gov/reminders>

VISN 1 PCE Forum <http://vawww.med.va.gov/visn1>

Hepatitis C Risk Assessment Notebook <http://vista2.med.va.gov/warboard/>

Clinical Guidelines Requirements

The National Center for Health Promotion has defined a set of fifteen reminders, which represent a minimum set that sites must report on yearly to comply with congressional law. Each VISN must comply with performance measures that address Prevention Index/Chronic Disease Index (PI/CDI), as well as with the HEALTH PROMOTION AND DISEASE PREVENTION PROGRAM Handbook 1120.2, which states that each VHA facility shall have a program to educate veterans with respect to health promotion and disease prevention and to provide veterans with preventive medical care that includes screening and other clinical services.

You can retrieve a copy of the handbook from the VA publications page.

<http://vaww.va.gov/publ/direc/health/handbook/1120-2hk.doc>

The clinical reminders package offers tools to help clinicians comply with these guidelines on a patient-by-patient basis.

Providers can work with their local ADP coordinators to set up customized reminders based on local and national guidelines for patient education, immunizations, skin tests, measurements, exams, laboratory tests, mental health tests, radiology procedures, and other procedures.

Clinician's Role in Setting up Reminders

Clinicians need to play a role in the set-up of reminders they use.

1. Defining clinical reminder definitions and using them within Health Summaries, CPRS Cover Sheet, and encounter forms. Clinicians will be asked to assist Clinical Application Coordinators in selecting which reminders to implement and in defining the clinical aspects of the Clinical Reminder definitions, including:
 - Defining Baseline Age Range Set(s)
 - Reminder Frequency
 - Minimum and Maximum Age
 - Defining findings that identify whether the reminder applies to the patient, findings that resolve (satisfy) the reminder, and findings that provide additional clinical information only from the following finding types:
 - Health Factors, Immunizations, Skin Tests, Education Topics, Exams
 - Taxonomies (ICD Diagnosis, ICD0 Operation/Procedure, CPT Procedure ranges)
 - Lab Tests and Radiology Procedures
 - Local Drugs, Generic Drugs and Drug Classes
 - Vital Signs
 - Orders to place
 - Computed Findings to handle miscellaneous findings.
2. Defining and using encounter forms that include findings related to reminders. The clinician plays a major role by appropriately marking encounter forms to reflect clinical interventions. As exams, tests, immunizations, screening, and education are given, the boxes are marked so the information can be entered into the computer by the clinician or clerk, or picked up by scanners and passed on to PCE to satisfy the clinical reminders.
3. Defining and using dialogs to resolve reminders with CPRS GUI: The new Clinical Reminders package provides tools for the Clinical Coordinator to define progress note text to represent a reminder's findings. The progress note text is associated with the reminder's findings. Within CPRS GUI, the clinician will have a point-and-click interface (called a "dialog") for each reminder you choose to process. As you check off check-boxed text indicating actions you took at a given encounter, text is accumulated to add to the note in progress. When you have finished processing the reminders, encounter information is entered in PCE, orders are placed, vital signs are updated, and mental health tests are scored and stored in the Mental Health package, according to your selections. These dialogs can include *Historical data* for patient visits that occurred sometime in the past (exact time may be unknown) or at some other location (possibly non-VA). This data is used to satisfy reminders and determine the next date due.

You can help your clinical coordinators define a list of possible actions related to the reminder, to create the appropriate dialog checkboxes for each reminder.

Using Clinical Reminders



That's the new clinical reminder. You must be due for a flu shot.

© 1999 *Robinson*

CPRS and Clinical Reminders

Clinicians can use reminders through CPRS in four places:

- Cover Sheet
- Notes tab
- Consults tab
- Reports tab

Cover Sheet

Clinical reminders are displayed on the cover sheet of CPRS. They can be customized for Site, Location, or User. When you click on a reminder, details are presented in a pop-up window.

You can display information within the reminder or see other related information on the cover sheet, such as diagnoses and lab results. A reminders icon (a clock) is in the top bar of the cover sheet. If you click on this icon, information about reminders is also displayed. Details about what's available from the Cover Sheet are provided in the following pages.

Notes tab

When you begin a new progress note, the reminders “drawer” (or button) appears below the templates “drawer,” which is below the list of notes. When you click on this drawer, it opens to show you folders for the reminders that are due, reminders that are applicable, and reminder categories under a folder called Other, if categories have been defined. You can then click on any of these folders to see and process specific reminders for this patient. Details about processing reminders from the Notes tab in a section that follows called Processing Reminders.

Consults Tab

When you begin a new consults note, the reminders drawer appears. It works in a similar way to that described above for progress notes.

CPRS Reports Tab

Health Summaries containing Clinical Reminders can be viewed from the Reports tab in CPRS. See the section on Health Summary later in this guide for more information.

Reminders on CPRS Cover Sheet

The reminders button is on the Patient Information Bar and may be selected from any of the CPRS tabs. When you click on the reminders button, an Available Reminders window opens displaying Due, Applicable, and Other folders. The Due and Applicable folders' reminders are based on the CPRS Cover Sheet reminder list parameter. The reminders in the Other folder are based on the CPRS Look-up categories parameter.

NOTE: See the Glossary for icon definitions.

VistA CPRS in use by: Green,Joann (DHCPSEVER)

File Edit View Tools Help

NEW PATIENT 333-22-1234 Apr 04,1911 (88) **8E** Provider: GREEN,JOANN Primary Care Team: Remote Data Postings WA

Active Problems
Coronary Artery Bypass

Allergies / Adverse Reactions
Aspirin
Dust
Flatulations
Codeine

Postings
Allergies
Clinical Warning Jan 06,00
Clinical Warning Apr 06,98
Clinical Warning Mar 31,98

Active Medications
Acetaminophen Tab Non-Verified

Clinical Reminders
Pneumovax DUE NOW
MENTAL HEALTH TESTS DUE NOW
Tobacco Use Screen Apr 16,91
Fecal Occult Blood Test DUE NOW

Recent Lab Results
No orders found.

Vitals
PN 99

Appointments / Visits / Admissions
No data found

Cover Sheet Problems Meds Orders Notes Consults D/C Summ Labs Reports

Reminders button (sun icon)

Reminders box (dropdown menu)

The reminders button

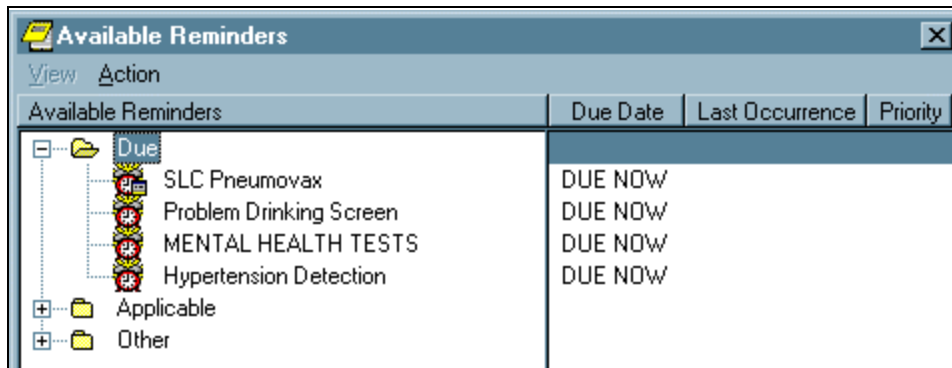
When you click on the reminders button, a window opens showing Due, Applicable, and Other folders (if present). The Other folder can contain folders. The folders and items displayed are based on the way reminders have been set up locally.

NOTE: You can't process reminders from this window. You can, however, review the reminders that are due and applicable to this patient. Coordinators can select the reminder button to quickly refresh dialogs as they build them.

Available Reminders Window

Reminders button

An available reminders window similar to the following opens when you click on the reminders button.

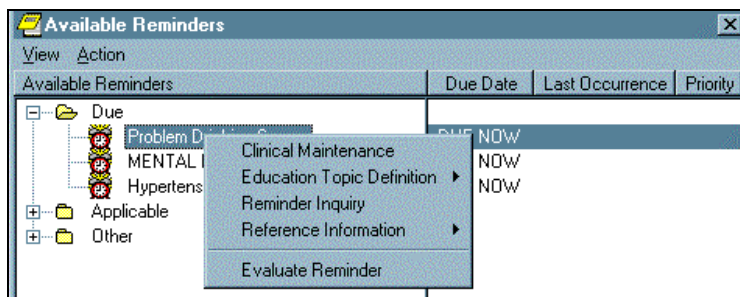


Due: The patient meets all the conditions for the reminders and the appropriate amount of time has elapsed. For example, the patient might be a 50-year-old male who has not had a prostate exam in 2 years. A reminder will only be Due if it was Applicable to the patient. The Applicable folder will contain the reminders that are applicable and no longer due.

Applicable: The patient meets all the conditions for the reminder, but the appropriate time has not elapsed. For example, a flu shot is given once a year, but it has not been a year yet when a patient comes in for a visit. Although a full year has not elapsed, the patient can still receive a flu shot at this visit.

Other: Reminder categories are contained in this folder. Reminder categories can be created to simplify processing; they might include all related reminders for a particular area such as diabetes or substance abuse.

Right-click on a reminder to bring up a popup menu with these possible menu items:



Available Reminders Window

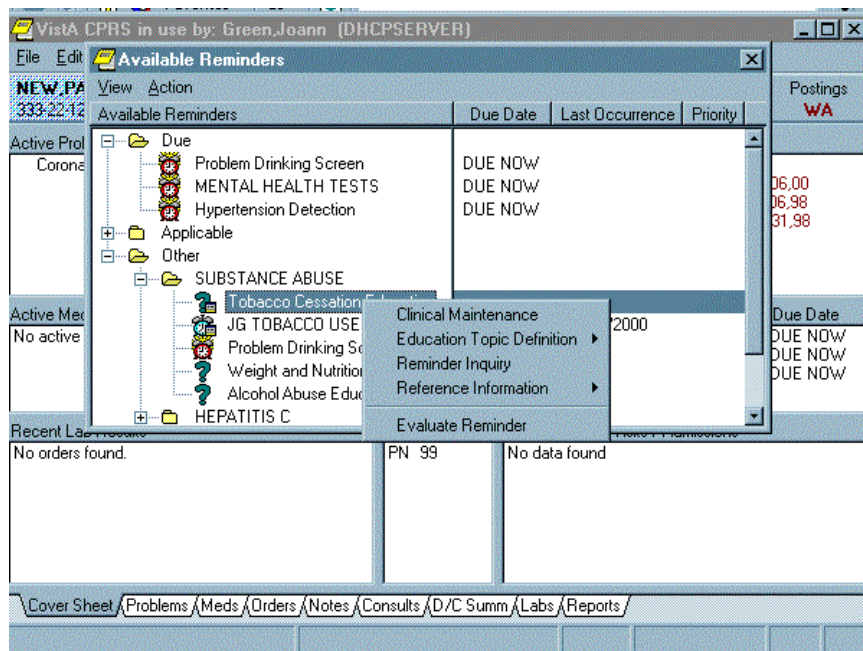
Available Reminders Menu items

Menu item	Description
Clinical Maintenance	Displays the patient data found based on the reminder definition. This is the same information that is displayed in the Health Summary Clinical Maintenance component.
Education Topic Definition	Lists any education topics that have been defined for a reminder. You can select a topic to view the desired education outcome and standards. If no education topics are related to this reminder, this menu item can't be selected.
Reminder Inquiry	Displays the reminder definition.
Reference Information	Lists web sites that may be selected for additional reference information.
Evaluate Reminder	Evaluates the reminder based on current patient data. The reminder is added to the Due or Applicable folder, if appropriate.

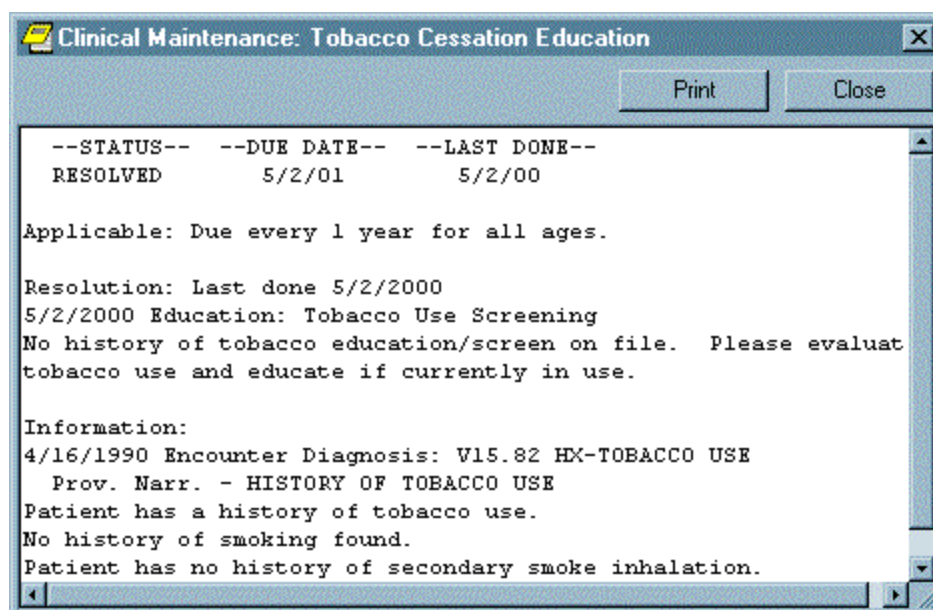
Each of these menu items will bring up a window. These are described on the following pages. When you are finished with the window, click Close.

Available Reminders Window

Clinical Maintenance



When you select Clinical Maintenance from the right-click menu, a window pops up showing the possible resolutions and findings associated with the reminder. Clinical maintenance status definitions are listed on the next page.



Clinical Maintenance Reminder Statuses

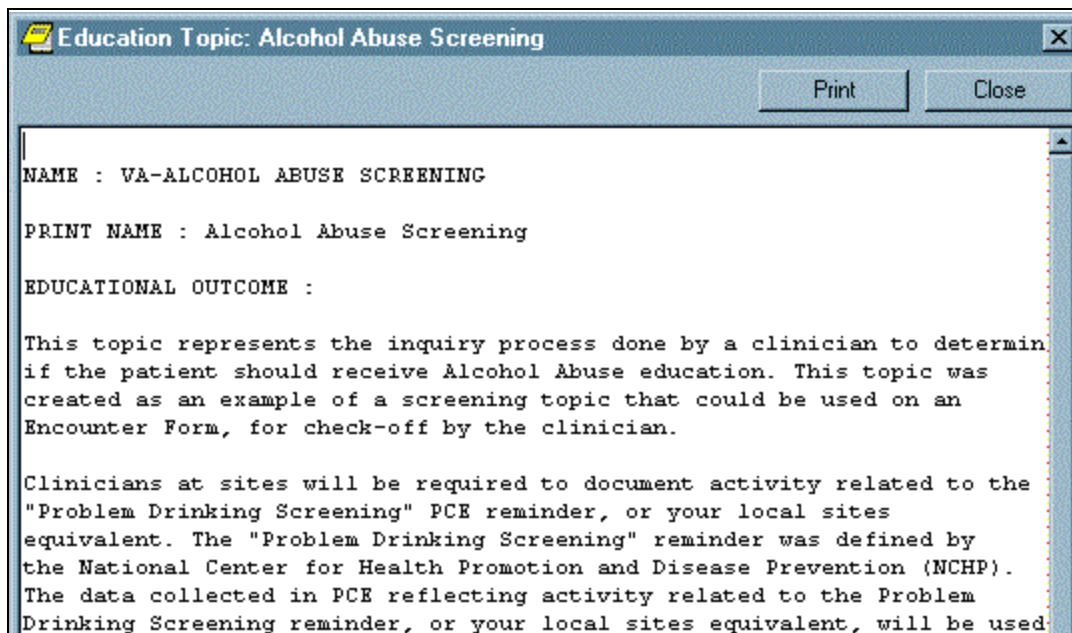
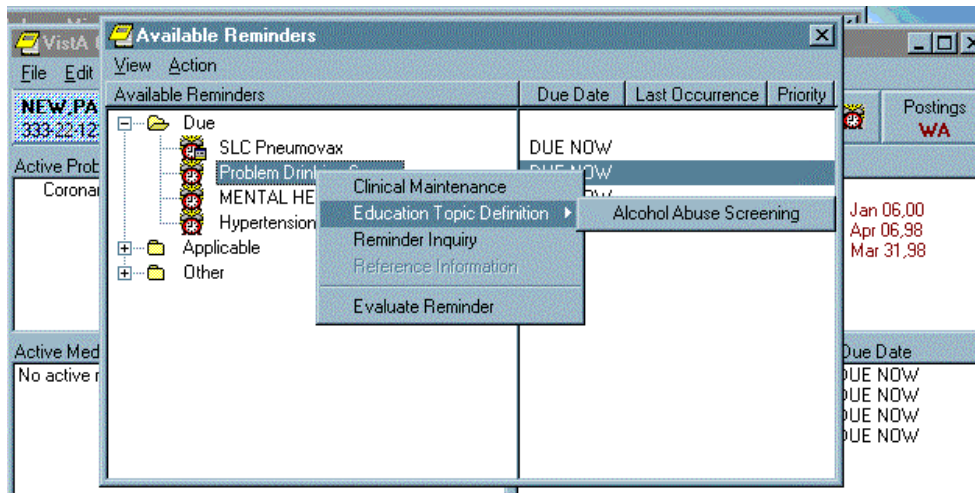
Reminder statuses are displayed in the Clinical Maintenance menu item in CPRS and in Health Summaries. The status is determined by evaluation of the PATIENT COHORT LOGIC and/or RESOLUTION LOGIC. These logic strings in turn depend on the other fields in the reminder definition, which are stored in the REMINDER DEFINITION file #811.9.

Status	Description
APPLICABLE	A reminder is defined as applicable when it meets the criteria set in patient cohort logic, as well as age range and baseline age findings.
DONE	When the final frequency for reminder is 99Y (99 years) it is done once in a lifetime. When reminders with this frequency are resolved they have the special status of DONE.
DUE NOW	There are two conditions that can make a reminder DUE NOW. The first is when the reminder has never been resolved in the past. The second is when the reminder has been resolved in the past but the amount of time specified by the final REMINDER FREQUENCY has been met or exceeded. For example, if the reminder was last resolved 18 months ago and the frequency is one year, then the reminder is DUE NOW. If the frequency was 2 years then the status would be RESOLVED.
DUE SOON	The field DO IN ADVANCE TIME FRAME is used to let a reminder become due earlier than the date determined by adding the frequency to the date when the reminder was last resolved. For example, if the frequency is 1Y (one year) and the DO IN ADVANCE TIME FRAME is 1M (one month) the reminder would have a status of DUE SOON beginning 11 months after it was last resolved. After one year has passed the status would be DUE.
ERROR	This status is returned when there is an error that prevents the reminder from being properly evaluated. Depending upon how a site chooses to set things up, a MailMan message containing details of the error will be sent either to a mailgroup or the user. The error will also be put into the error trap.
N/A	A reminder is N/A (non-applicable) if the patient is not in the cohort or group of patients to which this reminder applies. The PATIENT COHORT LOGIC provides a precise description of the cohort. Examples of Findings that can be used to determine the cohort include sex, age, and diagnosis. The remaining resolution statuses apply only to reminders that are applicable.
NEVER	This status applies only to reminders that are resolved by an immunization. Immunizations can be marked as contraindicated in the V IMMUNIZATION file. When this is the case the reminder will have the status of NEVER.
RESOLVED	A reminder is given a status of RESOLVED when all the criteria in the RESOLUTION LOGIC have been met. The criteria can be simple such as having an immunization or complex such as an order for an inhaler and inhaler use education.

Available Reminders Window

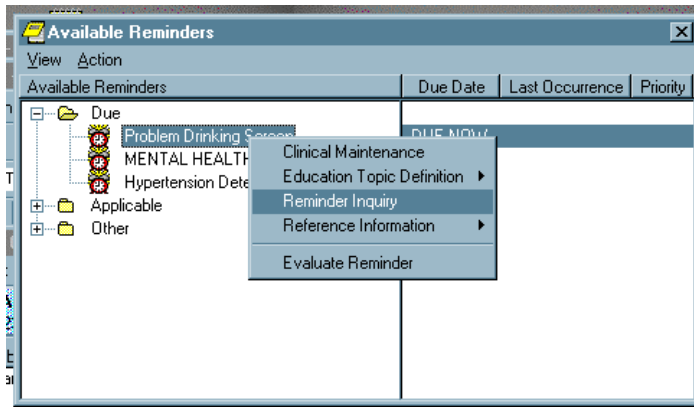
Education Topic Definition

When you select this menu item, a popup window displays any education topics that have been defined for a reminder. You can select a topic to view the desired education outcome and any standards. If no education topics are related to this reminder, this menu item can't be selected.

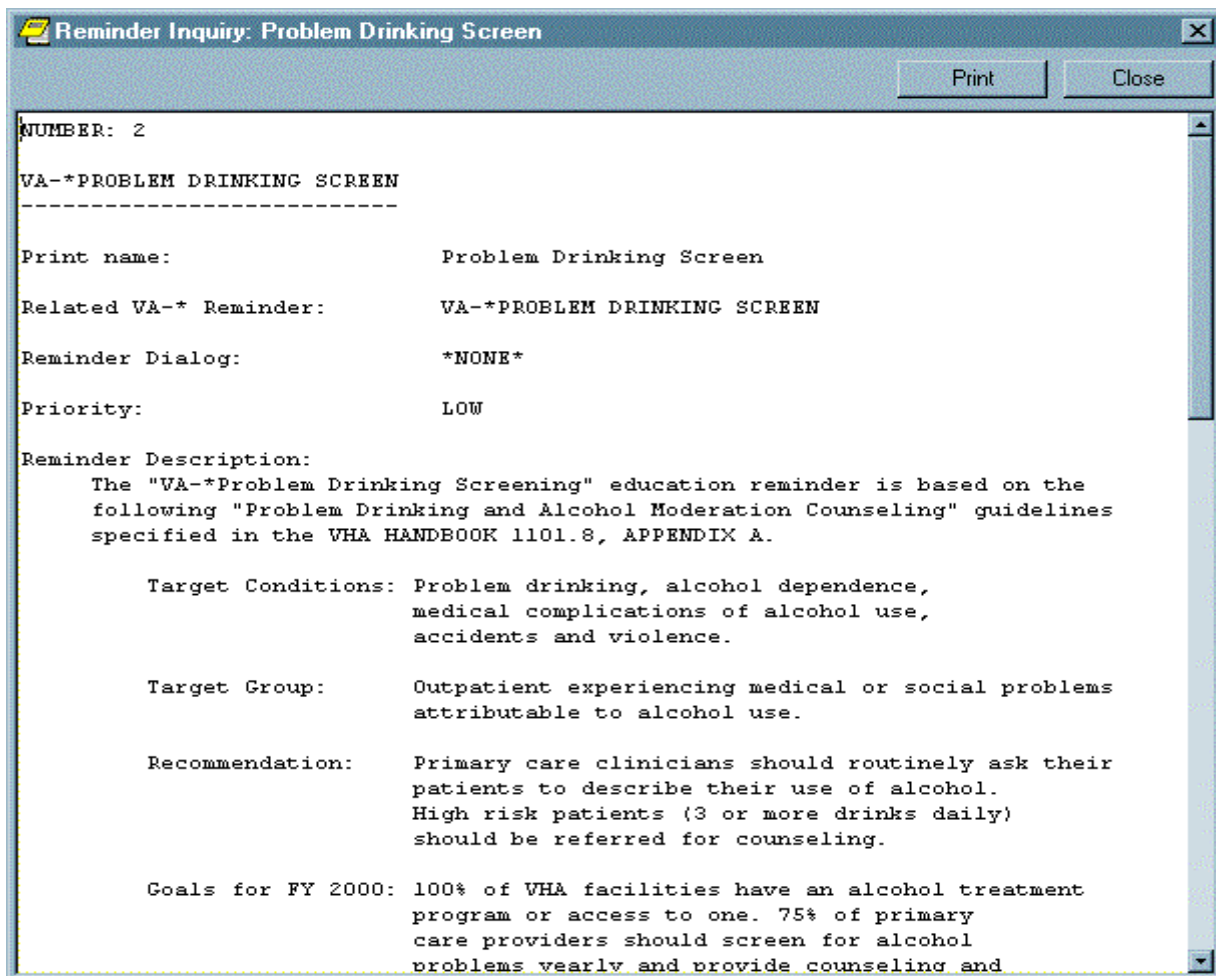


Available Reminders Window

Reminder Inquiry



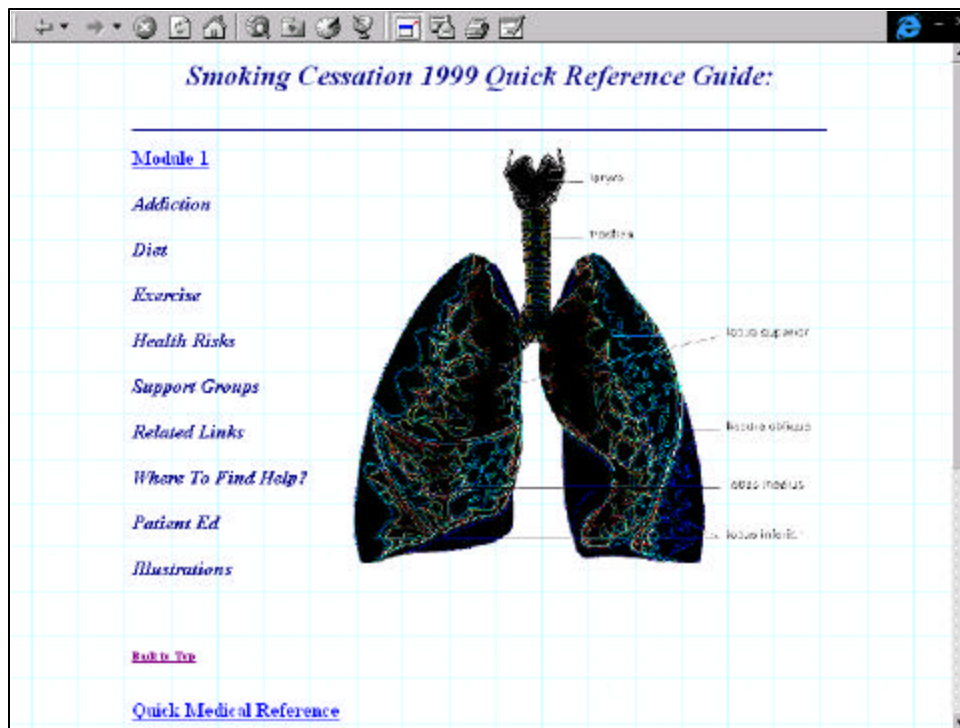
When you select this menu item, a popup window displays the reminder definition describing the criteria that determine which patients are selected for this reminder.



Available Reminders Window

Reference Information

When you select this menu item, it lists web sites, if they have been entered at your site. One of these may be selected for additional reference information, such as the following:

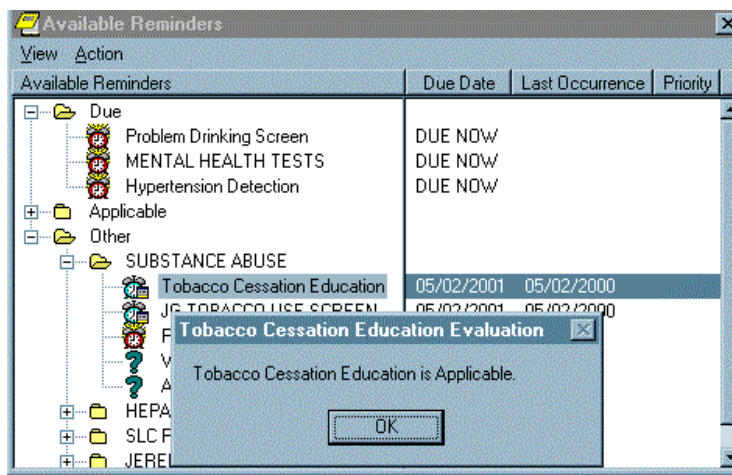
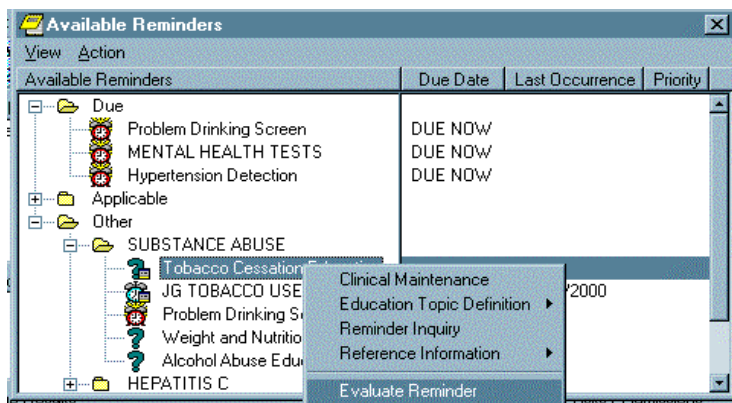


Available Reminders Window

Evaluate Reminder

Before you process reminders, you may selectively evaluate reminders. The Other folder, in the Available Reminders Window, contains reminder category folders and reminders that may not have been evaluated as part of the CPRS Cover Sheet Reminder list.

To evaluate reminders, right-click on a category or reminder and select the Evaluate Reminder menu item. The reminder(s) will be added to the Due or Applicable folder, based on the evaluation results, if appropriate.



NOTE: There are two forms of Reminder Evaluation, for use before and after processing reminders. See page 28 for instructions on evaluating reminders after processing them.

Reminder Processing from Notes Tab

These are the basic steps to process reminders in CPRS. These steps are described in more detail on the following pages.

1. **Start a new progress note.** To process a reminder, start a new progress note. When you begin a new progress note, the reminders drawer appears.
2. **Open the reminders drawer.** When you click on the reminders drawer, you see Due, Applicable, or Other folders containing reminders for this patient. The Other folder may contain a hierarchy of folders and reminders within folders, if your site has set up categories of related reminders for your convenience. The folders and subfolders in the Reminders Drawer are sometimes called the “tree view.”
3. **Choose a reminder.** Click a reminder that you wish to process. At this point you may be asked to provide the primary encounter provider, so that any PCE data entered from reminder dialog processing can be saved. If the reminder has an associated reminder dialog, a small dialog icon is shown in the bottom-right corner of the clock icon. If you click on one of these reminders, a dialog box appears, which lists possible actions or activities that may satisfy this reminder. The contents of this dialog have been created at your site by your Clinical Application Coordinator (CAC) or a Clinical Reminders manager.
4. **Complete the dialog box.** The dialog box lists possible actions or interventions that may be taken to satisfy this reminder. A Clinical Application Coordinator (CAC) or Clinical Reminders Manager defines the content of the dialog box at your site. Clinicians should be involved with defining these dialogs. As you make selections from the dialog box, you can see the text of the progress note below the Clear, Back, and Next buttons. Below the progress note text area is the encounter information including orders and PCE, Mental Health, and Vital Sign data. The bold text in these areas applies to the specific reminder you are processing. You can process multiple reminders.

Clinicians will be able to establish their own workflow by clicking on buttons in the dialog box.

Next and Back processing. Use the Next or Back buttons to take you to the dialog for the next or previous reminder due in the reminders drawer.

Clinical Maintenance review. While processing the reminder, you can review current Clinical Maintenance patient data related to the reminder by clicking on the Clinical Maint button at the bottom of the dialog box.

Reminder Processing

Clearing a single reminder. You will probably process several reminders for a single visit. If you have entered information on a reminder, but you need to start over on that reminder only, you can simply click on the reminder from the reminders drawer, then click the Clear button in the reminders dialog box. This removes the entries you have and lets you start again on this one reminder.

Canceling out of processing reminder dialogs. If you reach the reminders processing dialog by mistake or if you have entered information for reminders but you need to get rid of that information and start over, simply click Cancel.

- 5. Expanded dialog boxes.** Clicking a checkbox may bring up additional choices: an area for comments, a diagnosis to choose, or other information that may satisfy the reminder.

Dialog with orders. Reminder dialogs can include orders. If quick orders are included in the dialog, these are placed as soon as the reminder processing is finished and the orders are signed. If the order requires more information before releasing the order, an order dialog will appear after you click Finish, allowing you to complete the order.

Mental health tests. Reminder dialogs can include a pre-defined set of mental health tests. The reminder definition can include any mental health test, but the reminder dialog is limited in the GUI resolution process to allow clinicians to enter results for the following tests: AIMS, AUDC, AUDIT, BDI, CAGE, DOM80, DOMG, MISS, and ZUNG. Progress note text can be generated based on the mental health score.

- 6. Finish processing the reminder and complete your note.** Click on the Finish button when you have checked all the appropriate checkboxes for each reminder you wish to process. You then go back to the Note window, where you can review and edit the reminder dialog progress note text added to your note. After processing reminders, you can make other comments in the note and have a completed progress note for the encounter.
- 7. (Optional) Evaluate processed reminders.** You can use the Action menu to select the Evaluate Processed Reminders menu item from the Reminders Available window, to ensure that the reminders are satisfied. This action will evaluate the reminders that you processed while you wait, and update the Reminders Available window and reminders drawer lists to reflect the new statuses.

Reminder Processing

1. Start a new progress note.

When you begin a new progress note, the reminders “drawer” (or button) appears below the default list of notes. You will be prompted to enter Progress Note properties (Title, date, etc.) before you can begin processing reminders.

The screenshot shows the Vista CPRS interface for a new patient. The title bar reads "Vista CPRS in use by: Green,Joann (DHCPSEVER)". The menu bar includes File, Edit, View, Action, Options, Tools, and Help. The patient information section shows "NEW PATIENT" with ID "333-22-1234" and date of birth "Apr 04, 1911 (88)". The provider is "GREEN,JOANN". The primary care team is "Klark,Dic" and the attending is "Klark,Dic". The patient education section shows "PATIENT EDUCATION" with date "Mar 23,2000@11:11" and provider "Green,Joann". The subject field is empty. The default list of notes is displayed on the left, including "PATIENT EDUCATION, 8", "CLINICAL WARNING, 1A, CHAF", "MEDICINE CS CONSULT", "MEDICINE CS CONSULT", "MEDICINE CS CONSULT", "CARDIOLOGY CS CONS", "MEDICINE CS CONSULT", "Joel's Test Note, 1A, Joel", "CLINICAL WARNING, 1A, CHAF", "+ CLINICAL WARNING, 1A, CHAF", "+ PATIENT EDUCATION, 8", "+ PULMONARY CS CONS", "Final Discharge Note, 1A, I", and "General Note, 1A, MELAN". The "Reminders Drawer" is visible below the default list, showing "Templates", "Reminders", and "Encounter". The "Reminders" button is highlighted with a red arrow. The bottom of the interface shows tabs for "Cover Sheet", "Problems", "Meds", "Orders", "Notes", "Consults", "D/C Summ", "Labs", and "Reports".

Default List	PATIENT EDUCATION
Mar 23,00	PATIENT EDUCATION, 8
Jan 06,00	CLINICAL WARNING, 1A, CHAF
Jun 17,99	Cardiology Note, 1A, CHAF
Jun 11,99	MEDICINE CS CONSULT
Jul 06,98	MEDICINE CS CONSULT
Jun 18,98	MEDICINE CS CONSULT
Jun 18,98	CARDIOLOGY CS CONS
Jun 11,98	MEDICINE CS CONSULT
Apr 23,98	Joel's Test Note, 1A, Joel
Apr 06,98	CLINICAL WARNING, 1A, CHAF
Mar 31,98	+ CLINICAL WARNING, 1A, CHAF
Mar 31,98	+ PATIENT EDUCATION, 8
Feb 02,98	+ PULMONARY CS CONS
Jun 10,91	Final Discharge Note, 1A, I
May 28,91	General Note, 1A, MELAN

Reminders Drawer

Reminder Processing

2. Open the reminders drawer

Click on the reminders drawer (button) to see reminders. Due, Applicable, or Other folders may be displayed, enclosing those three kinds of reminders.

VistA CPRS in use by: Green,Joann (DHCPSEVER)

File Edit View Action Options Tools Help

NEW,PATIENT 333-22-1234 Apr 04,1911 (89) 8E Provider: GREEN,JOANN Primary Care Team L Remote Data Postings WA

Default List

Date	Reminder
Jun 14,00	PATIENT EDUCA
Jun 11,00	PATIENT EDUCA
Jun 11,00	PATIENT EDUCA
May 02,00	PATIENT EDUCA
May 02,00	PATIENT EDUCA

Templates

Reminders

- Due
- Applicable
- Other

Encounter

PATIENT EDUCATION Jun 14,2000@08:36 Green,Joann Change...

Vst: 04/16/90 8E R

Subject:

This Patient Education is for NEW,PATIENT.

<No encounter information entered>

Cover Sheet Problems Meds Orders Notes Consults D/C Summ Labs Reports

Due: The patient meets all the conditions for the reminders and the appropriate amount of time has elapsed. For example, the patient might be a 50-year-old male who has not had a prostate exam in 2 years.

Applicable: The patient meets all the conditions for the reminder, but the appropriate time has not elapsed. For example, a flu shot is given once a year, but it has not been a year yet when a patient comes in for a visit. Although a full year has not elapsed, the patient can still receive a flu shot at this visit.

Other: Reminder categories are contained in this folder. Reminder categories can be created to simplify processing. They might include all related reminders for a particular area such as diabetes or substance abuse.

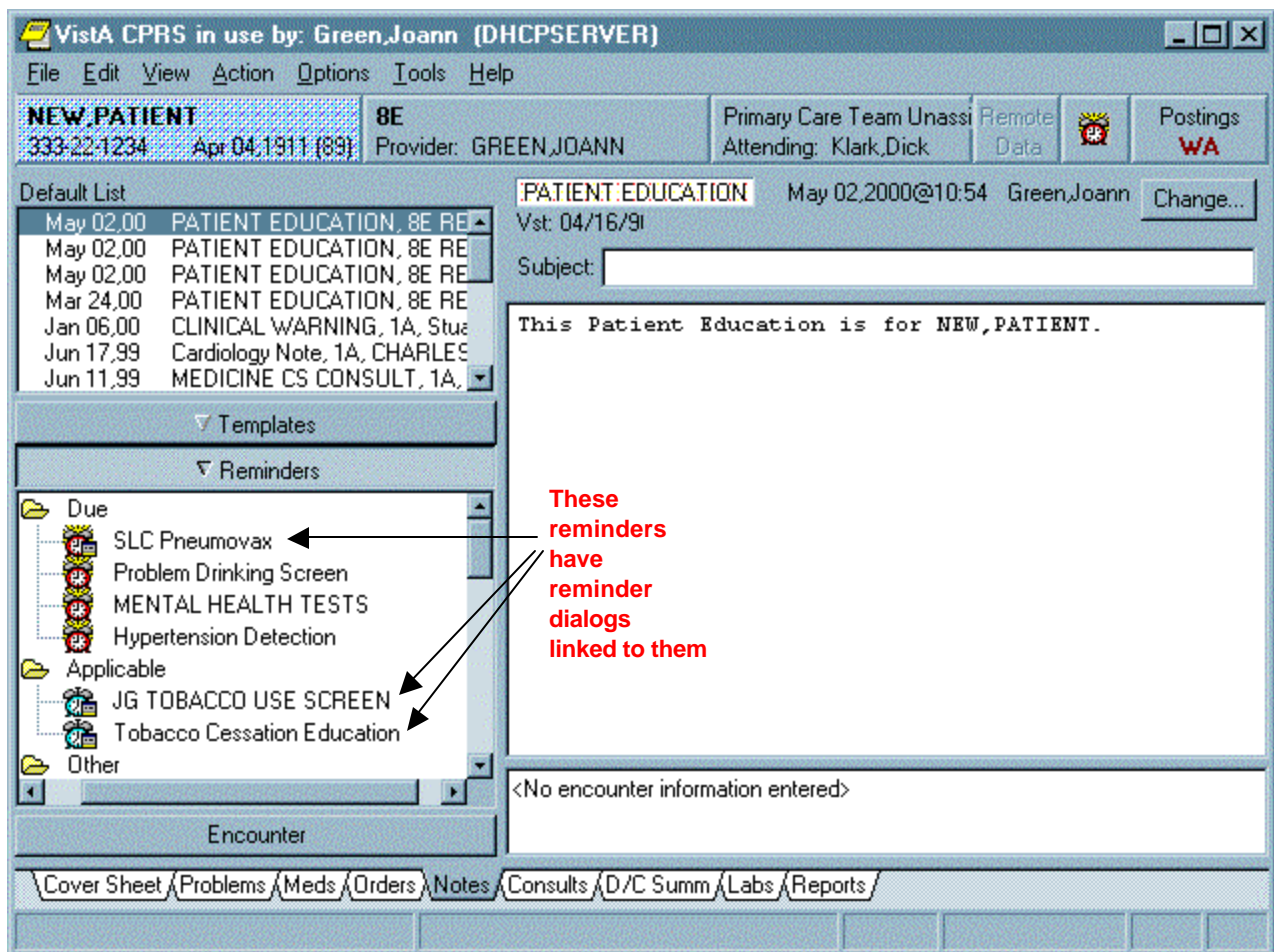
Reminder Processing

3. Choose a reminder.

Open a folder (Due, Applicable, or Other) and click on the reminder you wish to process. The Other folder may contain folders for categories that have been created at your site.

To process a reminder, a “reminder dialog” must be defined and associated (linked) with to the reminder. This is done by your Clinical Reminders Manager or coordinator (usually with clinician assistance). If a reminder dialog is available for a reminder, an icon representing a dialog is on the corner of the clock.

If the reminder has already been processed by a CPRS GUI reminder resolution process, a checkmark is shown over the dialog icon. The checkmark goes away when you select a patient or evaluate the processed reminders.



Reminder Processing

4. Complete the dialog box.

When you select a reminder to process, a dialog box appears, such as the one below. It shows the possible things that may satisfy the reminder.

Many items will expand – open new dialog boxes – to elicit more information, such as dates, locations, diagnoses, test results, or whatever else the reminders need. These dialog items are based on guidelines at your site and how your Reminders coordinators or managers created the reminders and dialogs. See the next page for an example of an expanded box.

When you click a checkbox or item, the associated text that will be placed in the progress note is shown in the area below the buttons. Data that will update PCE, orders, Vital Signs, and Mental Health packages for the item will be placed in the area below that.

Reminder Resolution: Tobacco Cessation Education

☒ Patient had tobacco use screening at this encounter.
Level of Understanding: **Good**
Comment:
☐ Didn't smoke at the visit. ☐ Smoked at Visit.

☐ Patient received tobacco use screening at another facility.
☐ Patient declined tobacco use screening at this encounter.
☒ Patient had smoking cessation education at this encounter.
Level of Understanding: **Good**
Comment:

GREEN NOTES
Tobacco Cessation Education:
Patient had tobacco use screening at this encounter.
Level of Understanding: Good
Patient had smoking cessation education at this encounter.
Level of Understanding: Good

Patient Educations: Smoking Cessation, Tobacco Use Screening

Reminder resolution dialog

Progress Note text

Data that will update PCE, orders, Vital Signs, and Mental Health packages.

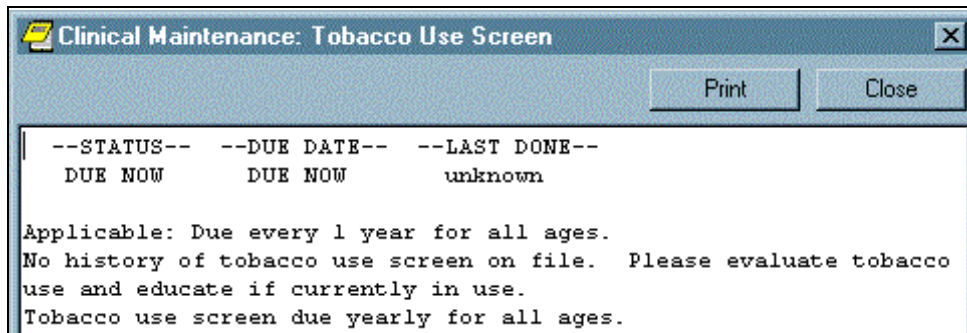
Next and Back processing

Use the Next button to process the next reminder that is due in the reminders drawer. Use the Back button to take you to the reminder processed previously to the one you are currently processing.

Reminder Processing

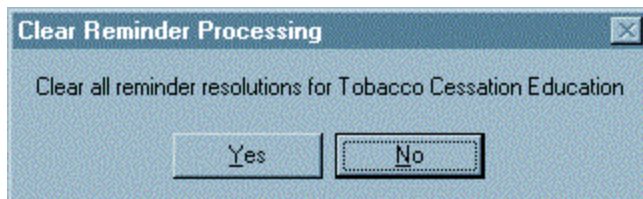
Clinical Maintenance review

While processing the reminder, you can review current Clinical Maintenance patient data related to the reminder by clicking on the Clinical Maint button at the bottom of the dialog box.



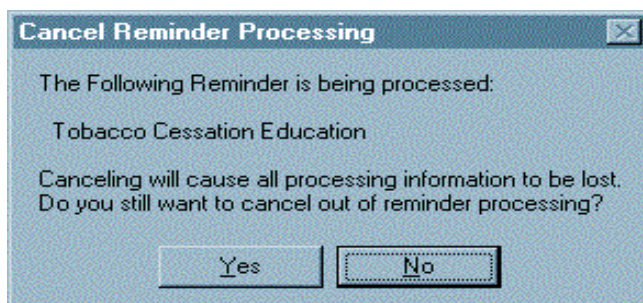
Clearing a single reminder

You will probably process several reminders for a single visit. If you have entered information on a reminder, but you need to start over on that reminder only, you can simply click Clear on the reminder from the reminders drawer, then click the Clear button in the reminders dialog box. This removes all previous dialog selections from the reminder's dialog box and removes the related text and data from the Progress Note text box and the PCE data box for this reminder. You can now start processing again. NOTE: Clicking Clear will remove the information from only one reminder. Be careful that you are on the correct reminder before you click Clear.



Canceling out of the Processing dialog

If you reach the Reminders Processing dialog by mistake or you wish to delete information that you have entered and start over, click Cancel. NOTE: If you click Cancel, you will lose all of the information for reminders that you have entered.



Reminder Processing

5. Expanded dialog boxes

Some statements in a dialog generate a new set of checkboxes, such as the one below about Hepatitis C diagnosis, which allows you to select a diagnosis and add it to the problem list. Also, note that orders can also be placed, such as the lab test and Hepatitis C Antibody.

Reminder Resolution: Hepatitis C Risk Assessment

☐ Patient refused to complete screening tool.
☐ Patient has risk factor for hepatitis c recorded.
☐ Patient denies risk factors for Hepatitis c.
☒ Patient has a diagnosis of hepatitis C
☐ Current hepatitis C diagnosis
☒ Patient has been previously diagnosed with hepatitis C
Selectable Diagnoses: Chronic Hepatitis C W/O Mention Of Hepatic Coma (070.54)
Date: April 1, 1999 Location: West-Palm, FL
Comment: Verified by review of West-Palm Beach Va's records via Remote Data
☐ Primary Diagnosis ☒ Add to Problem List
☐ HCV RNA Qualitative lab test was ordered.
☐ HEPATITIS C ANTIBODY Ordered.

Clear Clinical Maint < Back Next > Finish Cancel

CLINICAL ACTIVITY-
Hepatitis C Risk Assessment:
Patient has a diagnosis of hepatitis C
Patient has been previously diagnosed with hepatitis C
Selectable Diagnoses: Chronic Hepatitis C W/O Mention Of Hepatic Coma (070.54)
Date: April 1, 1999
Location: West-Palm, FL
Comment: Verified by review of West-Palm Beach Va's records via Remote Data

Diagnoses: CHRONIC HEPATITIS C W/O MENTION OF HEPATIC COMA (Historical)

Expanded box that allows diagnostic codes to be added.

Orders added

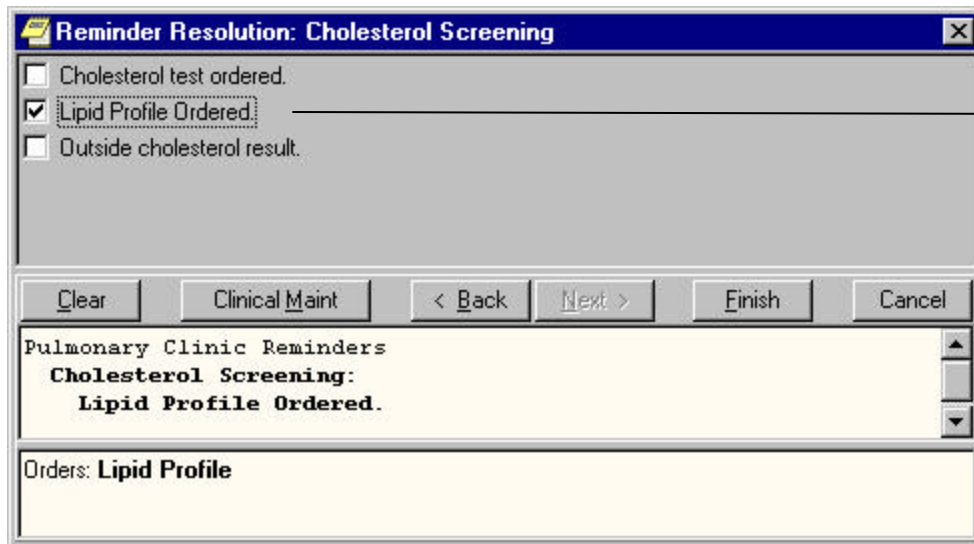
Text that will be added to Progress Note

Data that will update PCE, orders, Vital Signs, and Mental Health packages.

Reminder Processing

Reminder dialog with orders

Reminder dialogs can include orders, as in the example below:



Reminder Resolution: Cholesterol Screening

☐ Cholesterol test ordered.

☒ Lipid Profile Ordered.

☐ Outside cholesterol result.

Clear Clinical Maint < Back Next > Finish Cancel

Pulmonary Clinic Reminders

Cholesterol Screening:
Lipid Profile Ordered.

Orders: Lipid Profile

When you
check these
boxes, orders
are placed

If quick orders are included in the reminder dialog, these are activated as soon as the progress note is completed and the note and order are signed. If the order requires more information before completion, an order dialog will appear after you click Finish, allowing you to complete the order.

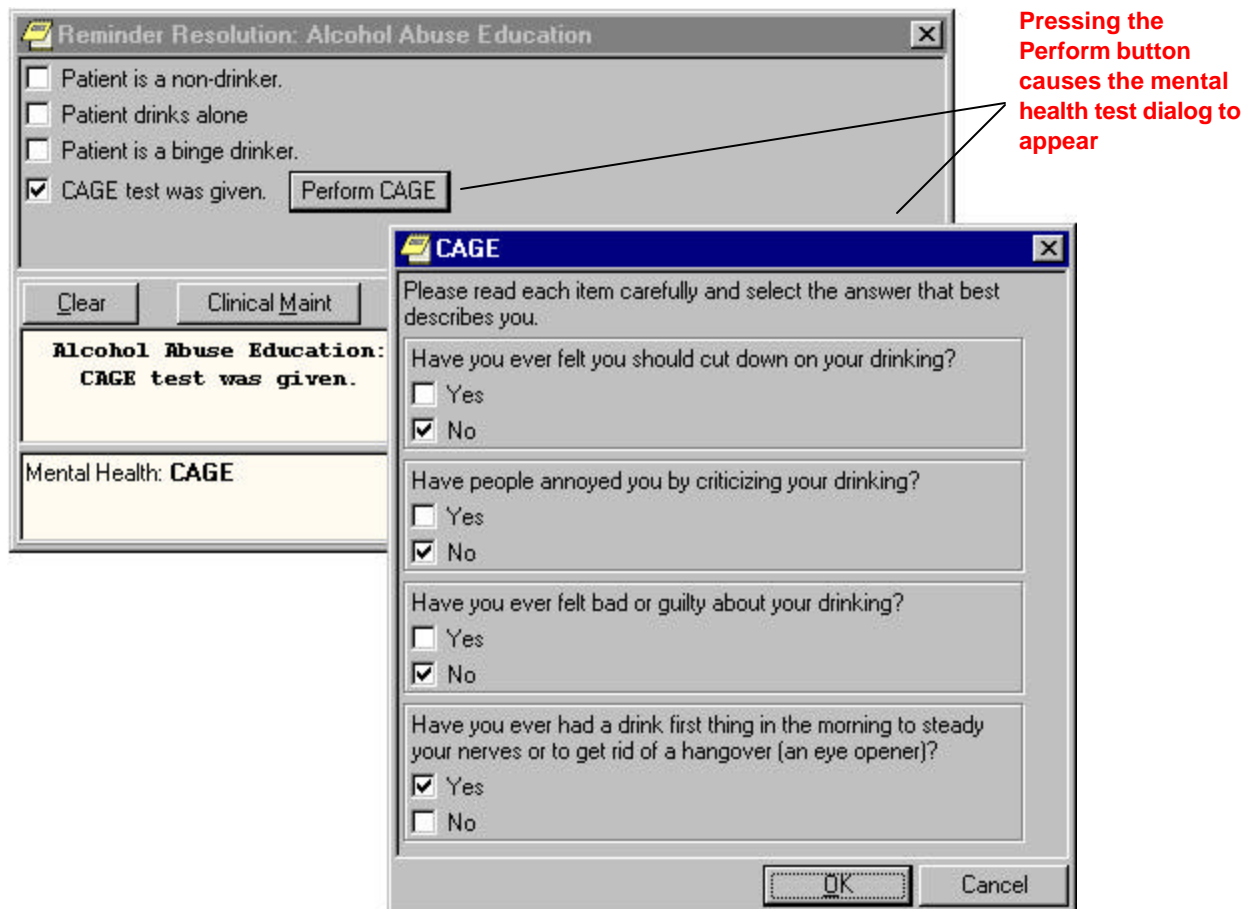
Reminder Processing

Mental health tests

Dialogs for mental health tests can be set up for your site's use. A reminder definition can include any mental health test, but the reminder GUI resolution process will currently only work with the following tests:

AIMS, AUDC, AUDIT, BDI, CAGE, DOM80, DOMG, MISS, and ZUNG

An example of giving a mental health test in a reminder dialog is shown here:



Reminder Processing

Mental health, cont'd

After the test questions have been answered, appropriate text (including the test score) for the test is entered into the progress note.

Reminder Resolution: Alcohol Abuse Education

☐ Patient is a non-drinker.
☐ Patient drinks alone
☐ Patient is a binge drinker.
☒ CAGE test was given. **Perform CAGE**

Alcohol Abuse Education:
CAGE test was given.
An alcohol screening test (CAGE) was negative (score=1).

Mental Health: CAGE

Mental Health
Result Text

VistA CPRS in use by: Green,Joann (DHCPSEVER)

File Edit View Action Options Tools Help

NEW PATIENT 333-22-1234 Apr 04, 1911 (89) Provider: GREEN,JOANN Primary Care Team Unassigned Remote Data Postings WA

Default List **PATIENT EDUCATION** May 03,2000@09:29 Green,Joann Change...

May 03,00 PATIENT ED Vst: 04/16/90 8E REHAB MED
May 02,00 PATIENT ED
May 02,00 PATIENT ED
Mar 24,00 PATIENT ED
Jan 06,00 CLINICAL W
Jun 17,99 Cardiology N
Jun 11,99 MEDICINE C
May 02,99 PATIENT ED
Jul 06,98 MEDICINE C
Jun 18,98 MEDICINE C
Jun 18,98 CARDIOLOG
Jun 11,98 MEDICINE C
Apr 23,98 Joel's Test N
Apr 06,98 CLINICAL W
Mar 31,98 + CLINICAL W
Mar 31,98 + PATIENT E
Feb 02,98 + PULMONA
Jun 10,91 Final Dischar
May 28,91 General Note

Subject: This Patient Education is for NEW,PATIENT.

GREEN NOTES
Mental Health Test:
CAGE (Mental Health Instrument)
An alcohol screening test (CAGE) was negative (score=1).

<No encounter information entered>

Cover Sheet Problems Meds Orders Notes Consults D/C Summ Labs Reports

Reminder Processing

6. Finish processing the reminder

After you have entered all the information, you can finish processing the reminders. When you finish, the following things will happen:

- The predefined text is placed in the note you have begun writing.
- The encounter information is sent to PCE.
- Mental health test results are filed with the Mental Health package.
- If there are orders defined in the dialog, it will also create the orders. If the orders require input (if they are not predefined quick orders without prompts), the order dialogs will come up so that you can complete the orders. You will then have to sign any orders that are created.

To finish processing reminders, click Finish.

Reminder Resolution: Tobacco Cessation Education

☒ Patient had tobacco use screening at this encounter.
Level of Understanding: Good
Comment:

☐ Didn't smoke at the visit. ☐ Smoked at Visit.

☐ Patient received tobacco use screening at another facility.
☐ Patient declined tobacco use screening at this encounter.
☒ Patient had smoking cessation education at this encounter.
Level of Understanding: Good
Comment:

Clear Clinical Maint < Back Next > Finish Cancel

GREEN NOTES
Tobacco Cessation Education:
Patient had tobacco use screening at this encounter.
Level of Understanding: Good
Patient had smoking cessation education at this encounter.
Level of Understanding: Good

Patient Educations: Smoking Cessation, Tobacco Use Screening

Reminder Processing

After you click Finish, you are returned to the Note screen, where you can see the text created by reminder processing. You can edit this, as necessary.

VistA CPRS in use by: Green,Joann (DHCPSEVER)

File Edit View Action Options Tools Help

NEW,PATIENT 333-22-1234 Apr 04,1911 (89) 8E Provider: GREEN,JOANN Primary Care Team L Remote Data Postings WA Attending: Klark,Dic Jun 14,2000@08:36 Green,Joann Change...

Default List

Jun 14,00	PATIENT EDUCA
Jun 11,00	PATIENT EDUCA
Jun 11,00	PATIENT EDUCA
May 02,00	PATIENT EDUCA
May 02,00	PATIENT EDUCA
Mar 24,00	PATIENT EDUCA
Jan 06,00	CLINICAL WARNI
Jun 17,99	Cardiology Note, 1
Jun 11,99	MEDICINE CS CO
May 02,99	PATIENT EDUCA
Jul 06,98	MEDICINE CS CO
Jun 18,98	MEDICINE CS CO
Jun 18,98	CARDIOLOGY CS
Jun 11,98	MEDICINE CS CO
Apr 23,98	Joel's Test Note, 1
Apr 06,98	CLINICAL WARNI
Mar 31,98	+ CLINICAL WAR

Templates Reminders Encounter

PATIENT EDUCATION Jun 14,2000@08:36 Green,Joann Change...
Vst: 04/16/90 8E R
Subject:

This Patient Education is for NEW,PATIENT.

GREEN NOTES
Tobacco Cessation Education:
Patient had tobacco use screening at this encounter.
Level of Understanding: Good
Patient had smoking cessation education at this encoun
Level of Understanding: Good

Patient Educations: Tobacco Use Screening, Smoking Cessation

Cover Sheet Problems Meds Orders Notes Consults D/C Summ Labs Reports

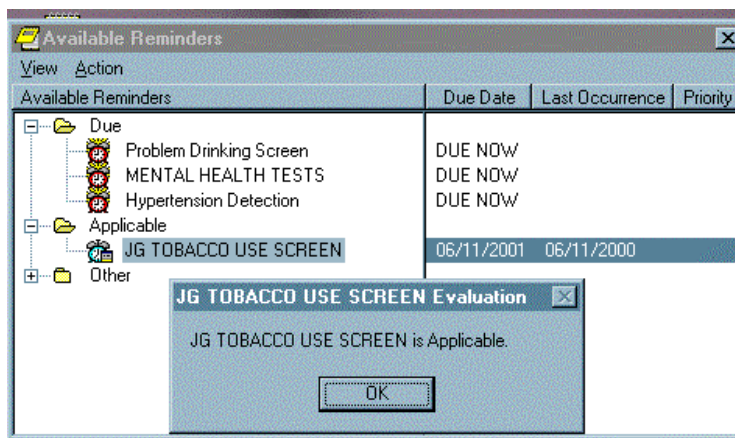
Reminder Processing

7. (Optional) Evaluate processed reminders

After you have processed a reminder, you can use this menu item in the Available Reminders window to see if your actions during the encounter satisfied the reminder. This action will evaluate the reminders that you processed while you wait, and update the Reminders Available window and Reminders drawer lists to reflect the new statuses.

NOTE: PCE data may take a few minutes to be correctly recorded. Please wait a few minutes after processing a reminder before evaluating it again to ensure that it was satisfied.

To evaluate processed reminders, go to the Available Reminders dialog by clicking on the Reminders button, choose Action, and then click on Evaluate Processed Reminders.



Reminders and Health Summary

Reminder items are added to health summary selection components for a given health summary type. When the health summary type is run, the Clinical Reminders software evaluates the patient's data and returns the results to the health summary for display. Health summaries and reminder definitions can be tailored to suit clinicians' needs.

Health Summary Reminder Components

- ◆ *Reminder Due*: an **abbreviated** component indicating only **what is due now**.

Example of *Reminder Due* as displayed on a health summary:

	--STATUS--	--DUE DATE--	--LAST DONE--
Advanced Directives Education	DUE NOW	DUE NOW	unknown
Alcohol Abuse Education	DUE NOW	DUE NOW	unknown

- ◆ *Reminder Summary*: this component provides the status, the next due date, and the last done date.

Example of *Reminder Summary* as displayed on a health summary:

	--STATUS--	--DUE DATE--	--LAST DONE--
Mammogram	RESOLVED	05/01/2000	10/01/1999
Pap Smear	DUE NOW	06/01/2000	unknown
Diabetic Eye Exam	DUE NOW	06/01/2000	06/01/1999

- ◆ *Reminder Maintenance*: this component provides:
 1. Details about what was found from searching the **VISTA** clinical data.
 2. Text related to the findings found or not found (as defined in the reminder). This includes taxonomies (ICD or CPT codes), health factors, and test results related to the reminder and computed findings (e.g., Body Mass Index).
 3. Final frequency and age range used for the reminder.

NOTE: Statuses include "DUE SOON," to allow you to process a reminder in advance, if convenient.

Example of *Reminder Maintenance* as displayed on a health summary:

----- CM - Reminder Maintenance -----			
	--STATUS--	--DUE DATE--	--LAST DONE--
Fecal Occult Blood Test	DUE NOW	DUE NOW	unknown
Applicable: Due every 1 year for ages 50 and older. No HX of colorectal cancer on file - presumed no HX.			
Health Factor Test	DUE NOW	DUE NOW	unknown
Applicable: Due every 1 year for ages 40 to 60. Baseline set to 1Y for 40-60.			

Reminders and Health Summary

Example

```
06/14/2000 09:44
***** CONFIDENTIAL REMINDERS TEST (2) SUMMARY *****
DISABILITIES,RATED 291-88-8299 1A DOB: 02/11/1923

----- CS - Reminders Summary -----

The following disease screening, immunization and patient education
recommendations are offered as guidelines to assist in your practice.
These are only recommendations, not practice standards. The
appropriate utilization of these for your individual patient must be
based on clinical judgment and the patient's current status.

Diabetic Foot Exam          --STATUS--  --DUE DATE--  --LAST DONE--
                           RESOLVED      06/13/2001   06/13/2000

----- CR - Reminders Due -----

The following disease screening, immunization and patient education
recommendations are offered as guidelines to assist in your practice.
These are only recommendations, not practice standards. The
appropriate utilization of these for your individual patient must be
based on clinical judgment and the patient's current status.

Advanced Directives Education  --STATUS--  --DUE DATE--  --LAST DONE--
                           DUE NOW      DUE NOW      unknown
Alcohol Abuse Education       DUE NOW      DUE NOW      unknown
Exercise Education            DUE NOW      DUE NOW      unknown
Seat Belt Education           DUE NOW      DUE NOW      unknown
Tobacco Cessation Education   DUE NOW      DUE NOW      unknown

----- CM - Reminder Maintenance -----

The following disease screening, immunization and patient education
recommendations are offered as guidelines to assist in your practice.
These are only recommendations, not practice standards. The
appropriate utilization of these for your individual patient must be
based on clinical judgment and the patient's current status.

Cholesterol Screen (Male)     --STATUS--  --DUE DATE--  --LAST DONE--
                           N/A          unknown

    Applicable: Due every 0Y - Not Indicated for all ages.

Fecal Occult Blood Test       DUE NOW      DUE NOW      unknown

    Applicable: Due every 1 year for ages 50 and older.

Flexisigmoidoscopy           DUE NOW      DUE NOW      unknown

    Applicable: Due every 1 year for ages 50 and older.
    SIG due every 5 years for patients 50 and older, or FOBT annually.

Press <RET> to continue, ^ to exit, or select component: <Enter>
```

Reminders and Health Summary

Example, cont'd

```
06/14/2000 09:44
***** CONFIDENTIAL REMINDERS TEST (2) SUMMARY *****
DISABILITIES,RATED    291-88-8299    1A    DOB: 02/11/1923

----- CM - Reminder Maintenance -----
              (continued)

              --STATUS-- --DUE DATE-- --LAST DONE--
Hypertension Detection      DUE NOW    05/12/2000    05/12/1998

  Applicable: Due every 2 years for all ages.
  Resolution: Last done 5/12/1998
  5/12/1998 Measurement: BLOOD PRESSURE; rate - 140/85
  Date of last ICD or CPT coded hypertension screen unknown.

Influenza Immunization      DUE NOW    DUE NOW    unknown

  Applicable: Due every 1 year for ages 65 and older.
  Influenza vaccine due yearly in patients ages 65 and older.

Pneumovax                  DUE NOW    DUE NOW    unknown

  Applicable: Due every 99Y - Once for ages 65 and older.
  Pneumovax due once for patients 65 and over.

PPD                          N/A

  Applicable: Due every 0Y - Not Indicated for all ages.
  Patient may be low risk for TB, where PPD may not be indicated.
  No HX of TB or positive PPD diagnosis on file.
  Last date of PPD not known.  educate if currently in use.

Problem Drinking Screen      DUE NOW    DUE NOW    unknown

  Applicable: Due every 1 year for all ages.
  Screen for alcohol problems yearly for all patients.

Tobacco Use Screen          DUE NOW    DUE NOW    unknown

  Applicable: Due every 1 year for all ages.
  No history of tobacco use screen on file.  Please evaluate tobacco
  use and educate if currently in use.
  Tobacco use screen due yearly for all ages.

Weight and Nutrition Screen  DUE NOW    DUE NOW    unknown

  Applicable: Due every 1 year for all ages.
  Weight and Nutrition screen due yearly for all patients.

* END *
Press <RET> to continue, ^ to exit, or select component: ^
```

Reminders and Health Summary

Health Summary on Reports Tab in CPRS

When you open the Reports tab, select Health Summary, and then select a Type that has reminder components defined for it.

The screenshot displays the VistA CPRS interface. The title bar indicates the user is 'Green, Joann' and the server is 'DHCPSEVER'. The menu bar includes File, Edit, View, Tools, and Help. The patient information section shows 'TEST, JAMIE' with ID '111-22-3333' and birth date 'Oct 10, 1910 (89)'. The provider is 'GREEN, JOANN'. The report type is '1A B-3'. The status is 'Primary Care Team Unassigned' and 'Remote Data' is available. The 'No Postings' button is also visible.

The 'Available Reports' list on the left includes: Health Summary, Imaging, Lab Status, Blood Bank Report, Anatomic Path Report, Dietetics Profile, Nutritional Assessment, and Vitals Cumulative. The 'Types' list includes: Rem Cm for Va-, Rem Cr for Va-, Reminders Test (1), Reminders Test (2), and Reminders Test (3). The 'Reminders Test (3)' report is selected.

The report content is titled 'Health Summary - Reminders Test (3)' and 'CONFIDENTIAL REMINDERS TEST (3) SUMMARY pg. 1'. It includes a disclaimer: 'The following disease screening, immunization and patient education recommendations are offered as guidelines to assist in your practice. These are only recommendations, not practice standards. The appropriate utilization of these for your individual patient must be based on clinical judgment and the patient's current status.'

The report lists the following screening recommendations:

Screening	STATUS	DUE DATE	LAST DC
Breast Cancer Screen	N/A		unknown
Applicable: Due every 0Y - Not Indicated for all ages. Date of last mammogram/screen unknown.			
Pap Smear	N/A		unknown
Applicable: Due every 0Y - Not Indicated for all ages. No record of cervical cancer screen taxonomy on file Pap smear screen not indicated for women over 65.			
Cholesterol Screen (Female)	N/A		unknown

The bottom of the interface shows a tabbed menu with 'Reports' selected. Other tabs include Cover Sheet, Problems, Meds, Orders, Notes, Consults, D/C Summ, and Labs.

Reminder Reports

Currently, there is one clinical reminders report option that clinicians can use for summary or detailed level information about patients' reminders due. Reports allow you to verify diagnoses, verify that appropriate treatment was given, identify patients requiring intervention, and validate effectiveness of care.

Reminders Due Report

For a selected reminder, the report lists any reminders that are currently due. Reports can be defined by the following criteria:

- Individual Patient
- Hospital Location (all patients with encounters)
- OE/RR Team (all patients in team)
- PCMM Provider (all practitioner patients)
- PCMM Team (all patients in team)

A **summary** report displays totals of how many patients of those selected have reminders due. *The summary report may be run for several reminders.*

A **detailed** report displays patients with reminders due, in alphabetical order. The report displays for each patient the date the reminder is due, the date the reminder was last done, and next appointment date. The detailed report can also list all future appointments, if specified. Detailed reports for Location or Provider may also be sorted by next appointment date.

Reports by Hospital Location, Provider, or Team print a separate report for each Hospital Location, Provider, or Team selected. Reports for all Hospital Locations are not separated by individual locations.

The report by Hospital Location can report either current inpatients or admissions within a selected date range. *The detailed report can only include one reminder.*

Report templates

The selection criteria used for the Reminders Due reports may be saved into a report template file, with a user-specified identifier, as the report is being run.

When running the Reminder Due report, you may select from an existing template and run a new report using the parameters from the selected template. The prompts for date range and sort order are displayed, but all other parameters are taken from the previous report.

If you select a print template, you may also edit the template and/or copy to a new template before running the report.

Reminder Reports

Uses for Reminder Reports

Clinical Reminder reports can be used for many purposes, including the following:

- Patients in a panel or a clinic who have a reminder due
- Aggregate reporting
- Patient-specific reports for intervention
- Inpatients with a reminder due
- Intervention prior to discharge
- Identify patients who will be in clinic in the next month who need an intervention
- Identify patients who have left the clinic in the past week who missed having an intervention
- Identify patients with a lab finding but no diagnosis made
- Employee Health Tracking
- Inpatient education, exams, immunizations
- Reports on patients eligible for a study
- Identify high risk patients
- Disease-specific reminders: HCV, HIV, Melanoma, Diabetes

Reminder Reports

Summary Report by PCMM Provider

This report lists the total number of reminders due for patients allocated to a provider within PCMM. The summary report may be run for several reminders. (The detailed report can only include one reminder.) A future date may be entered if a report of reminders becoming due is required. Today is the default date.

Example:

Select Clinical Reminders Management Option: **RP** Reminder Reports

D Reminders Due Report

Select Reminder Reports Option: **D** Reminders Due Report

Select an existing REPORT TEMPLATE or return to continue: <Enter>

Select one of the following:

I	Individual Patient
L	Location
O	OE/RR Team
P	PCMM Provider
T	PCMM Team

PATIENT SAMPLE: L// **PCMM Provider**

Select PROVIDER: **DEAN, TOM** TD

Select another PROVIDER: <Enter>

Select one of the following:

P	Primary care assigned patients only
A	All patients on list

PRIMARY CARE ONLY OR ALL: P// **All patients on list**

Enter EFFECTIVE DUE DATE: Apr 08, 2000//<Enter> (APR 08, 2000)

Select one of the following:

D	Detailed
S	Summary

TYPE OF REPORT: S// <Enter> Summary

Select REMINDER: **MAMMOGRAM**

Select REMINDER: **VA-WEIGHT**

Select another REMINDER: **VA-BLOOD PRESSURE CHECK**

Select another REMINDER: <Enter>

DEVICE: HOME// <Enter> ALPHA

Evaluating reminders done

Reminder Reports

Summary Report by PCMM Provider, cont'd

```

                                         Apr 08, 2000 5:09:08 pm  Page 1

Clinical Reminders Due Report - Summary Report
Report Criteria:
    Patient Sample:      PCMM Provider
    PCMM Provider:      DEAN,TOM
    All/Primary:        All patients on list
    Effective Due Date : 4/08/2000
    Date run:           4/08/2000 5:06:54 pm

```

```

Enter RETURN to continue or '^' to exit: <Enter>

```

```

                                         Apr 08, 2000 5:09:11 pm  Page 2

                        Clinical Reminders Due Report - Summary Report for 1/20/2000

```

		# Patients with Reminders	
		Applicable	Due
		-----	----
1	Mammogram	0	0
2	Weight	8	6
3	Blood Pressure Check	8	7

```

Report run on 8 patients.

End of the report. Press ENTER/RETURN to continue...

```

The column Applicable excludes patients (e.g. dead or non-diabetic) that the reminder did not apply to, based on the patient cohort logic in the reminder. Excluded patients are included in the "Report Run on" total.

Reminder Reports

Detailed report by PCMM Provider (Next Appointment only)

This report provides details of patients with reminders due who are allocated to a provider within PCMM. This example report displays only the next appointment for each patient.

```
Select Reminder Reports Option: D Reminders Due Report
Select an existing REPORT TEMPLATE or return to continue: <Enter>
  Select one of the following:

      I      Individual Patient
      L      Location
      O      OE/RR Team
      P      PCMM Provider
      T      PCMM Team
PATIENT SAMPLE: L// PCMM Provider
Select PROVIDER:   DEAN,TOM      TD
Select another PROVIDER: <Enter>
  Select one of the following:
      P      Primary care assigned patients only
      A      All patients on list

PRIMARY CARE ONLY OR ALL: P// All patients on list

Enter EFFECTIVE DUE DATE: Jan 20, 2000// <Enter> (JAN 20, 2000)
  Select one of the following:
      D      Detailed
      S      Summary
TYPE OF REPORT: S// Detailed

Display All Future Appointments: N//<Enter> O

Sort by Next Appointment date: N//<Enter> O

Select REMINDER: VA-BLOOD PRESSURE CHECK

Create a new report template: N//<Enter> O

DEVICE: HOME// <Enter> ANYWHERE      Right Margin: 80// <Enter>

Evaluating reminders done

                                Jan 20, 2000 5:17:29 pm  Page 1

      Clinical Reminders Due Report - Detailed Report
Report Criteria:
  Patient Sample:      PCMM Provider
  PCMM Provider:      DEAN,TOM
  Reminder:           VA-BLOOD PRESSURE CHECK
  Appointments:       Next Appointment only
  All/Primary:        All patients on list
  Effective Due Date : 1/20/2000
  Date run:           1/20/2000 5:16:32 pm

Enter RETURN to continue or '^' to exit: <Enter>
```

Reminder Reports

Detailed Report by Provider, cont'd

Jan 20, 2000 5:17:32 pm Page 2

Clinical Reminders Due Report - Detailed Report for 1/20/2000

Blood Pressure Check: 7 patients have reminder due

		Date Due	Last Done	Next Appt
		-----	-----	-----
1	DINARO,MUCHO (3779)	8/28/1998	8/27/1998	None
2	ESSTEPON,GLORD (3234)	1/20/2000	N/A	None
3	HOLMES,SHERLOCK (5377)	1/20/2000	N/A	None
4	HOOD,ROBIN (2591P)	8/19/1999	8/18/1999	None
5	MARLEY,JACOB (5678)	9/4/1998	9/3/1998	None
6	TEST,KEVIN (5734)	2/3/1999	2/3/1997	None
7	TRAT,JACK (2342)	1/20/2000	N/A	None

Report run on 8 patients.

Applicable to 8 patients.

End of the report.

Press ENTER/RETURN to continue...

The date the reminder is due, date last done, and next appointment date are displayed for each patient.

Reminder Reports

Detailed Report by Individual Patient (All Future Appointments)

All future appointments for each patient can be reported on the detailed report. This example is of a detailed report that lists individual patients who will have the Weight reminder due based on Future Appointment selected date ranges.

```
Select Reminder Reports Option: D Reminders Due Report

Select an existing REPORT TEMPLATE or return to continue: <Enter>

    Select one of the following:
        I      Individual Patient
        L      Location
        O      OE/RR Team
        P      PCMM Provider
        T      PCMM Team
PATIENT SAMPLE: L// Individual Patient

Select PATIENT: TEST,KEVIN      12-5-48      432325734      SC VETERAN
Select another PATIENT: NEW,PATIENT      4-4-11      333221234      MILITARY RETIREE
Select another PATIENT: ABC,PATIENT      2-22-42      222324321      YES      ACTIVE DUTY
Select another PATIENT: <Enter>

Enter EFFECTIVE DUE DATE: Jun 14, 2000// T+30 (JUL 14, 2000)

    Select one of the following:
        D      Detailed
        S      Summary
TYPE OF REPORT: D// <Enter>etailed
Display All Future Appointments: N// YES

Select REMINDER: VA-WEIGHT

Create a new report template: N//<Enter> O

DEVICE: HOME// <Enter> ANYWHERE      Right Margin: 80// <Enter>
Evaluating reminders done

                                Jun 14, 2000 10:23:04 am Page 1

                Clinical Reminders Due Report - Detailed Report
Report Criteria:
    Patient Sample:      Individual Patients
    Individual Patients:  NEW,PATIENT
                        TEST,KEVIN
                        ABC,PATIENT
    Reminder:            VA-WEIGHT
    Appointments:        All Future Appointments
    Effective Due Date :  7/14/2000
    Date run:            6/14/2000 10:19:34 am

Enter RETURN to continue or '^' to exit: <Enter>
```

Reminder Reports

Detailed Report by Individual Patient (All Future Appointments), cont'd

Jun 14, 2000 10:23:08 am Page 2

Clinical Reminders Due Report - Detailed Report for 7/14/2000

Weight: 3 patients have reminder due

		Date Due	Last Done	Next Appt
		-----	-----	-----
1	ABC,PATIENT (4321)	6/21/2000	6/21/1999	7/01/2000
2	NEW,PATIENT (1234)	DUE NOW	N/A	None
3	TEST,KEVIN (5734)	2/3/2001	2/3/2000	2/3/2001

Report run on 3 patients.

Applicable to 3 patients.

End of the report. Press ENTER/RETURN to continue...

Reminder Reports

Summary Report by Location

The report by hospital location evaluates reminders due for patients attending the selected hospital location within a range of dates. If a prior date range is selected, all patients with encounters are selected. If a future date range is selected, patients with appointments for the location are selected.

The reports for selected hospital locations list reminders due for each location separately. The report for all locations reports reminders due for all locations combined.

Hospital Location, Clinic Stop, or Clinic Group code can be selected.

Reminders due today are reported.

```
Select PCE Reminder Maintenance Menu Option: RP  Reminder Reports

D      Reminders Due Report

Select an existing REPORT TEMPLATE or return to continue: <Enter>

    Select one of the following:
        I      Individual Patient
        L      Location
        O      OE/RR Team
        P      PCMM Provider
        T      PCMM Team

PATIENT SAMPLE: L// <Enter> Location

Select FACILITY: SALT LAKE CITY//<Enter>      UT      660
Select another FACILITY: <Enter>

    Select one of the following:
        HA      All Outpatient Locations (excluding wards)
        HAI     All Inpatient Locations (wards only)
        HS      Selected Hospital Locations
        CA      All Clinic Stops(with encounters)
        CS      Selected Clinic Stops
        GS      Selected Clinic Groups

Determine encounter counts for: HS// HS  Selected Hospital Locations

LOCATION: CARDIOLOGY      TEDD,DR
Select another LOCATION: <Enter>
    Select one of the following:
        P      Previous Encounters
        F      Future Appointments
PREVIOUS ENCOUNTERS OR FUTURE APPOINTMENTS: P// <Enter> Previous Encounters
```

Reminder Reports

Summary Report by Location, cont'd

```
Enter ENCOUNTER BEGINNING DATE: 3/1/00 ((MAR 01, 2000)
Enter ENCOUNTER ENDING DATE: 4/1/00 (APR 01, 2000)

Select SERVICE CATEGORIES: AI//<Enter>

    Select one of the following:
        D      Detailed
        S      Summary
TYPE OF REPORT: S// <Enter> Summary
Select REMINDERS: VA-D
    1  VA-DIABETIC EYE EXAM
    2  VA-DIABETIC FOOT CARE ED.
    3  VA-DIABETIC FOOT EXAM
    4  VA-DIGITAL RECTAL (PROSTATE) EXAM
CHOOSE 1-4: 1  VA-DIABETIC EYE EXAM
Select another REMINDER: VA-BLOOD PRESSURE CHECK
Select another REMINDER: VA-WEIGHT
Select another REMINDER: <Enter>

DEVICE: HOME// <Enter> ANYWHERE    RIGHT MARGIN: 80// <Enter>

Sorting Encounters /

Evaluating Reminders done

                                         Apr 09, 2000 10:16:49 am  Page 1

                PCE Reminders Due Report - Summary Report
Report Criteria:
    Patient Sample:      Location
    Location:            Selected Hospital Locations (Prior Encounters)
                        CARDIOLOGY
    Date Range:          3/1/00 to 4/1/00
    Date run:            04/9/00 10:15:34 am
    Service categories: AI
                        A - AMBULATORY
                        I - IN HOSPITAL

Enter RETURN to continue or '^' to exit: <Enter>

                                         Apr 09, 2000 10:16:57 am  Page 2

                PCE Reminders Due Report - Summary Report
Facility: SALT LAKE CITY 660
Reminders Due for CARDIOLOGY for 3/1/00 to 4/1/00

                                         # Patients with Reminders
                                         Applicable      Due
                                         -----      ---
1    Diabetic Eye Exam                  19              19
2    Blood Pressure Check                32              32
3    Weight                             32              32

Report run on 32 patients.
```

Reminder Reports

Scenario: How many patients are not receiving reminders who should be for Hepatitis C?

A report can be prepared that compares “Applicable” reminders to those that have been defined as “Due.” The difference may be a missed opportunity. This can be done by individual provider or for all providers in a location or medical center, as a quality assurance measure. The example below shows a summary report where the reminders selected are all related to Hepatitis C. This illustrates how you could use the summary report as part of a larger strategy for implementing and managing a Hepatitis C guideline using reminders.

Example Report

	# Patients with Reminder	
	Applicable	Due
	-----	---
Hep C Risk Factor Screen	172	16
Hep C Test for Risk	30	7
Hep C Diagnosis Missed	0	0
Hep C Diagnosis	36	36
Hep C- Dz & Trans Ed	36	27
Hep C - Eval for Rx	36	15
Chr Hep - Hep A Titer	45	3
Hepatitis A Vaccine	19	4
Chr Hepatitis - AFP	12	4
Chr Hepatitis - U/S	13	6
Report run on 175 patients.		

Creating a Working Clinical Reminder

Although most clinicians won't be required to create their own reminders, they can help the Clinical Reminders managers define and customize them for specific needs. Having a basic understanding of the components of a reminder and how they work is useful knowledge. The following is a brief introduction.

Two parts to creating a working clinical reminder

1. Creating the *reminder definition*, which describes who the reminder applies to, how often it is given, and what resolves or satisfies the reminder.
2. *Process issues*. These include who will use the reminder and how the data will be captured. The process issues are extremely important — if they are not worked out, the reminder will never work, even if the definition is correct.

Steps to create a working reminder

1. Write the reminder definition in a narrative format. Determine what characteristics the reminder will have (make a list). Which patients will the reminder be applicable for: age ranges, sex, diagnoses, etc. What satisfies the reminder and what makes it not applicable: diagnoses, lab results, x-rays, education, etc.

Reminders provide answers to the basic questions:

- WHO (Patient Cohort Logic)
- WHY (Clinical Maintenance)
- WHAT (Resolution Logic)
- WHEN (Frequency)
- WHERE (Location where activity occurred)

Example:

An FOBT will be due once every year for patients aged 50-99 (but not for ages 0-49 or >99), and not due in advance. It will be satisfied by the Target Lab Results. It won't apply to patients with a history of colorectal cancer

2. Create new findings, if required (for example, exams or health factors).
3. Create the reminder definition. If there is an existing reminder that is close, it is usually easier to copy it and then edit it than to start from scratch.
5. Test your reminder definition by evaluating the reminder for test patients. You should have patients who are in the cohort and who are not in the cohort. For patients who are in the cohort, you should have some who have the reminder resolved and some who do not.
6. Once you are certain the reminder works as intended, deploy it as appropriate; that is, add it to a health summary, encounter form, or the CPRS GUI cover sheet reminders list.

Glossary

Applicable

The patient meets all the conditions for the reminder, but the appropriate time has not elapsed. In order for a reminder to be applicable, the patient cohort findings defined in the reminder must have been found. For example, a flu shot is given once a year to patients 55 and older, but it has not been a year since the 58-year-old patient received his last flu shot.

Dialog

A dialog is a list of items/actions/sentences that can satisfy a reminder, with checkboxes you can click on to indicate which action you took during an encounter. These dialog items are based on guidelines at your site and how your Reminder Managers define the reminders and dialogs.

A dialog is an entry in the Reminder Dialog file. The entry may be a dialog element, a dialog group, an additional prompt, a result element, or a result group. (*See the Reminder Dialog definition in this glossary for more information.*)

Dialog element: A dialog element is defined primarily to represent sentences to display in the CPRS window with a check box. When the user checks the sentence off, the FINDING ITEM in the dialog element and the ADDITIONAL FINDINGS will be added to the list of PCE updates, orders, and mental health tests. The updates won't occur on the CPRS GUI until the user clicks on the FINISH button. Dialog elements may have components added to them. Auto-generated components will be based on the additional prompts defined in the Finding Type Parameters. Once a dialog element is autogenerated, the sites can modify them. Dialog elements may also be instructional text or a header. The FINDING ITEM and components are not defined in dialog elements.

Dialog group: A dialog group is similar to menu options. They group dialog elements and dialog groups within its component multiple. The dialog group can be defined with a finding item and checkbox. The components in the group can be hidden from the CPRS GUI window until the dialog group is checked off.

Prompt: A prompt is defined for PCE prompts or as locally created comment checkboxes. The prompts do not have any components within them. PXRm-prefixed prompts are distributed in this file with the Clinical Reminder package.

Result element: A result element contains special logic that uses information entered during the resolution process to create a sentence to add to the progress note. The special logic contains a CONDITION that, when true, will use the ALTERNATE PROGRESS NOTE TEXT field to update the progress note. A separate result element is used for each separate sentence needed. The result element is only used with mental health test finding items. Default result elements are distributed for common mental health tests, prefixed with PXRm and the mental health test name. Sites may copy them and modify their local versions as needed.

Glossary

Result group: A result group contains all of the result elements that need to be checked to create sentences for one mental health test finding. The dialog element for the test will have its RESULT GROUP/ELEMENT field defined with the result group. Default result groups for mental health tests are distributed with the Clinical Reminders package. Sites may copy them and modify their local versions as needed.

Drawer

Drawers are what we call the buttons on the Notes screen for Templates, Reminders, and Encounters. After you begin a new note, you will see the Reminders button or “drawer.” Click to open the drawer and see a tree view of reminders that are due, applicable, and other reminders.

Due, Applicable, Other

Due: The patient meets all the conditions for the reminders and the appropriate amount of time has elapsed. In order for a reminder to be due, the patient cohort findings defined in the reminder must have been found, and the resolution findings must have not been found within the required frequency. For example, if a rectal exam should be given every 2 years for male patients over 50 years old, the reminder will be due for male patients, over 50 years old, where it has been over 2 years since the last rectal exam or there is no exam on file.

Applicable: The patient meets all the conditions for the reminder, but the appropriate time has not elapsed. In order for a reminder to be applicable, the patient cohort findings defined in the reminder must have been found. For example, a flu shot is given once a year to patients 55 and older, but it has not been a year since the 58-year-old patient received his last flu shot. Although a full year has not elapsed, the patient can still receive a flu shot at this visit rather than scheduling a separate visit for the near future to provide the flu shot. A reminder can be applicable and due or applicable and not due. The Applicable category in the Reminders Available window contains the list of reminders that are applicable and not due.

Other: This folder contains Reminder Categories if ones have been created at your site. Categories group together related reminders, to make processing more efficient. Each Category will have its own folder within the Other folder.

Findings

VISTA data that can resolve a reminder or be used in reminder logic. This includes Lab, Vitals, Pharmacy, and Radiology data, as well as computed findings defined by your coordinators (see the list of Finding Types on the next page). Findings have three functions in reminder definitions. They can be used to select the applicable patient population (Patient Cohort Logic), to resolve the reminder (Resolution Logic), and for informational purposes.

Glossary

Finding Types

Drug Education Topic, Exam, Health Factor, Immunization, Laboratory Test, Mental Health Instrument, Orderable Item, Radiology Procedure, Reminder Computed Finding, Reminder Taxonomy, Reminder Term, Skin Test, VA Drug Class, VA Generic, and Vital Measurement.

Forced Value

A forced value is like the prompt dialog, but the you won't see the prompt because the value is automatically stuffed into the field. An example of its use is when a dialog element is created for “refused” education topic. Since the sentence already indicates refused, “REFUSED” is automatically stuffed into the Level of Understanding field, removing the need for the clinician to answer the Level of Understanding prompt.

Health Factors

Conditions, procedures, and interventions related to patient treatment and health that do not have diagnostic or procedural codes, such as Alcohol Use, Binge Drinking, Current Non-Smoker, Current Smoker, Currently Pregnant, Family Hx Of Alcohol Abuse, Lifetime Non-Smoker, No Risk Factors For Hep C, etc.

Patient Cohort

A group of patients that a reminder applies to (“applicable”); for example, all patients with diabetes, or all patients over 50 with diabetes, or all male patients over 50 with diabetes. The SEX, AGE and USE IN PATIENT COHORT LOGIC fields in the reminder definition determine whether the patient is in the patient cohort. If the patient is in the patient cohort, the reminder is applicable.

Reminder Categories

A category defines a group of reminders and may include other sub-categories. Categories appear in the Other folder in the Notes and Consults tabs of the CPRS GUI. Categories can be based on medical service, disease process, or clinician.

Reminder Dialog

A reminder dialog is a combination of dialog entries defined in the Reminder Dialog file that are associated with a reminder definition. The dialog entries work together to define the clinical interventions that resolve a specific reminder. The dialogs include dialog groups, dialog elements (sentences), additional prompts, result groups and result elements. The reminder dialog is used by the CPRS GUI for reminder resolution processing. The reminder dialog defines the checkboxes clinicians can click on to document clinical interventions related to a reminder during an encounter. Some checkboxes will expand when clicked, displaying new dialog boxes, prompts and/or additional checkboxed elements. An example of additional prompts would be prompts to document a historical exam requiring entry of dates, locations, and exam results. Reminder dialogs should be autogenerated based on the reminder definition and then modified as needed. The autogenerated reminder dialog is based on reminder dialog parameters defined by your site's Reminders Manager. *(See the Dialog entry in this glossary for more information about dialog entries.)*

Glossary

Resolve, Reminders Resolution

Recording or taking action that satisfies a reminder. For example, if a reminder exists for influenza immunization, giving a flu vaccine satisfies or resolves that reminder. Likewise, ordering lab tests or drugs or giving patient education can resolve a reminder.

Taxonomy

Procedures and interventions related to a reminder that have diagnostic or procedural codes.

Tree View

A hierarchical view of folders and reminders that you see when you press the Reminders button. You get a similar view when the reminders drawer is open. It shows the reminders divided into the Due, Applicable, and Other folders.

Glossary – Status Definitions

Clinical Maintenance Reminder Statuses








Reminder statuses are displayed in the Clinical Maintenance Menu item in CPRS and in Health Summaries. The Status is determined by evaluation of the PATIENT COHORT LOGIC and/or RESOLUTION LOGIC.

Status	Description
N/A	A reminder is N/A (non-applicable) if the patient is not in the cohort or group of patients to which this reminder applies. The PATIENT COHORT LOGIC provides a precise description of the cohort. Examples of Findings that can be used to determine the cohort include sex, age, and diagnosis. The remaining resolution statuses apply only to reminders that are applicable.
RESOLVED	A reminder is given a status of RESOLVED when all the criteria in the RESOLUTION LOGIC have been met. The criteria can be simple such as having an immunization or complex such as an order for an inhaler and inhaler use education.
DUE NOW	There are two conditions that can make a reminder DUE NOW. The first is when the reminder has never been resolved in the past. The second is when the reminder has been resolved in the past but the amount of time specified by the final REMINDER FREQUENCY has been met or exceeded. For example, if the reminder was last resolved 18 months ago and the frequency is one year, then the reminder is DUE NOW. If the frequency was 2 years then the status would be RESOLVED.
DUE SOON	The field DO IN ADVANCE TIME FRAME is used to let a reminder become due earlier than the date determined by adding the frequency to the date when the reminder was last resolved. For example, if the frequency is 1Y (one year) and the DO IN ADVANCE TIME FRAME is 1M (one month) the reminder would have a status of DUE SOON beginning 11 months after it was last resolved. After one year has passed the status would be DUE.
DONE	When the final frequency for reminder is 99Y (99 years) it is done once in a lifetime. When reminders with this frequency are resolved they have the special status of DONE.
NEVER	This status applies only to reminders that are resolved by an immunization. Immunizations can be marked as contraindicated in the V IMMUNIZATION file. When this is the case the reminder will have the status of NEVER.
ERROR	This status is returned when there is an error that prevents the reminder from being properly evaluated. Depending upon how a site chooses to set things up, a MailMan message containing details of the error will be sent either to a mailgroup or the user. The error will also be put into the error trap.

Glossary – Icon Definitions

Evaluation status icons are displayed in the CPRS GUI as follows:

- On the Patient Information bar. One icon summarizes the highest evaluation status found when evaluating the cover sheet reminders. The icon displayed is based on having at least one reminder DUE, APPLICABLE, NOT APPLICABLE, NONE DUE/APPLICABLE, or NOT EVALUATED. (This reminders button icon changes as reminders from the Reminders Available list are selected and evaluated.)
- In the Notes tab reminders drawer or Reminders Available window (right-click on reminders button). The individual reminders form a tree list for DUE, APPLICABLE, and OTHER reminders. The OTHER reminders are reminder categories that may be expanded to list reminders available for additional evaluation/processing.

Icon	Description
	Red, ringing alarm clock means that a reminder is due. When present on the reminders button, there is at least one reminder due.
	Blue, non-ringing alarm clock means that a reminder is not due, but applicable. When present on the reminders button, there is at least one applicable reminder, and there are no reminders due.
	Wall clock means that a reminder is not applicable. When present on the reminders button, there is at least one reminder that is not applicable, and there are no reminders that are due or applicable.
	Question mark means that a reminder's status of due, applicable or not applicable has yet to be evaluated. When present on the reminders button, no available reminders have been evaluated. This typically happens when cover sheet reminders are not defined or have not yet been evaluated.
	Present only on the reminders button, a grayed-out alarm clock means that there are no reminders due or applicable, and there are no reminder categories available.
	Present only in the reminders tree, a dialog icon is displayed in the lower right hand corner of a clock icon when there is a reminder dialog associated with that reminder.
	Present only in the reminders tree, a dialog icon, with a check mark over the dialog, is displayed in the lower right hand corner of a clock icon after the reminder dialog associated with that reminder has been processed. When these reminders are re-evaluated, the check mark is removed.

FAQs & Tips

Q: What is the difference between the exported Clinical Reminders that have an asterisk (*); e.g. VA-*SEAT BELT AND ACCIDENT SCREEN and ones that don't: e.g., VA- SEAT BELT EDUCATION

A: The asterisk (*) identifies the reminders related to the National Center for Health Promotion. They were created based on the 13 issues identified by the National Center for Health Promotion in Handbook 1101.8. However, that handbook has been replaced by Handbook 1120.2 ("HEALTH PROMOTION AND DISEASE PREVENTION PROGRAM"). You can retrieve a copy from the VA publications pages on the web.
<http://vaww.va.gov/publ/direc/health/handbook/1120-2hk.doc>

Most of the other reminders beginning with VA- were created with input by the "Ambulatory Care Expert Panel" which no longer exists.

Q: Are the reminders our site has already defined compatible with the new Clinical Reminders V. 1.5 package?

A: Yes, a conversion utility is run when the package is installed that converts your reminders to the new file structure. Be sure to follow the instructions in the Installation Guide to set a few important parameters.

Q: Can we use the reports functionality "out of the box" as soon as we install V. 1.5, or do we have to define reminders first?

A: Reports can be run on the National reminders that are distributed "out of the box," but National reminders will not include local findings so the report counts will not be correct. Once local reminders are defined and tested, you will primarily run the reports based on site-specific reminders.

Q: If orders are included in dialogs and I check these through the Notes tab in CPRS, are the orders actually placed, or is this just recording the intention to order something?

A: The order is actually placed, just as if you had ordered through the Orders tab. If the order is set up as a quick order, it will go through immediately (when you click the Finish button); if not a quick order, further questions will be asked to complete the order. The order will still need to be signed.

FAQs & Tips

Q: When I click on a reminder to process, I get a message saying “no dialog is defined for this reminder.” What does this mean and what do I need to do?

A: See your CAC or Clinical Reminders manager. They need to create and link a dialog for this reminder.

Q: What do clinicians need to learn to use the new Clinical Reminders functionality?

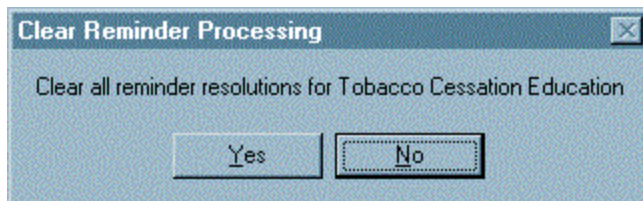
A: The most important things to learn will be related to changes in workflow. It will be important to coordinate orders that are placed through reminder dialogs with nurses and clerks. You can work with your CACs and teams to share the responsibility for reminders so that no individual is overwhelmed with reminders. Also, learning to use reports correctly to produce meaningful data will be essential.

Tips

Clearing a Single Reminder

You will probably process several reminders for a single visit. If you have entered information on a reminder, but you need to start over on that reminder only, you can click Clear on the reminder from the Reminders Drawer, then click the Clear button in the Reminders dialog box. This removes all previous dialog selections from the reminder's dialog box and removes the related text and data from the Progress Note Text box and the PCE data box for this reminder. You can now start processing again.

NOTE: Clicking Clear will remove the information from only one reminder. Be careful that you are on the correct reminder before you click Clear.



Canceling Out of the Processing Dialog

If you reach the Reminders processing dialog by mistake or you wish to delete information that you have entered and start over, click Cancel.

NOTE: If you click Cancel, you will lose all of the information for reminders that you have entered.

